

Title (en)

Method and apparatus for sensing in wellbores

Title (de)

Verfahren und Vorrichtung zum Messen in Bohrlöchern

Title (fr)

Procédé et appareil de détection dans des puits de forage

Publication

**EP 2735699 A3 20141231 (EN)**

Application

**EP 13194628 A 20131127**

Priority

US 201261730420 P 20121127

Abstract (en)

[origin: EP2735699A2] Methods and apparatus for sensing wellbore conditions in artificial lift wells using low profile sensors that are installed on down hole production equipment that makes them easier to install and retrieve. In one embodiment, low profile sensors are installed on a rod string making their insertion and removal much easier than it would be if they were mounted on production tubing. The sensors can be attached directly to the rod string or can be attached to a cable that is attached to the rod string. The sensors can transmit their data electrically through the cable or through the rod string. Alternatively, the sensors can transmit their data acoustically through the rod string.

IPC 8 full level

**E21B 47/00** (2012.01)

CPC (source: EP US)

**E21B 43/121** (2013.01 - EP US); **E21B 47/008** (2020.05 - EP US); **E21B 47/009** (2020.05 - EP US); **E21B 47/06** (2013.01 - EP US); **F04B 47/02** (2013.01 - EP US); **F04B 47/026** (2013.01 - EP US); **F04B 49/06** (2013.01 - EP US); **E21B 47/14** (2013.01 - US)

Citation (search report)

[XI] US 4968934 A 19901106 - ROBINET ALAIN [FR], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

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**EP 2735699 A2 20140528**; **EP 2735699 A3 20141231**; **EP 2735699 B1 20190109**; CA 2834480 A1 20140527; CA 2834480 C 20160705; US 2014158347 A1 20140612; US 9447677 B2 20160920

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